

**IN THE CLAIMS**

Claims 1-6 (Cancelled).

7. (Previously Presented) A method of manufacturing a solid-electrolyte battery comprising:

- forming a first set of gel-electrolyte layers on both sides of a positive electrode collector;
- forming a second set of gel-electrolyte layers on both sides of a negative electrode collector;
- forming a positive electrode comprising the first set of gel-electrolyte layers on both sides of the positive electrode collector;
- forming a negative electrode comprising the second set of gel-electrolyte layers on both sides of a negative electrode collector;
- laminating said positive electrode and said negative electrode such that one of the first set of gel-electrolyte layers and one of the second set of gel-electrolyte layers face each other;
- winding said positive electrode and said negative electrode such that another one of the first set of gel-electrolyte layers and one of the second set of gel-electrolyte layers of face each other; and
- subjecting said wound electrodes to heat treatment so that each of the first set of gel-electrode layers and the one of the second set of gel-electrolyte layers facing each other are integrated with each other into one continuous seamless layer,

wherein,

wherein said gel-electrolyte layers comprise an electrolyte salt, a  
nonaqueous solvent and a matrix polymer.

8-9. (Canceled).

10. (Original) The method of claim 7, wherein said wound electrodes are subjected to heat treatment for ten minutes.

11. (Previously Presented) The method of claim 7, wherein said gel-electrolyte layers comprise one of  $\text{LiPF}_6$ ,  $\text{LiAsF}_6$ ,  $\text{LiBF}_4$ ,  $\text{LiClO}_4$ ,  $\text{LiCF}_3\text{SO}_3$ ,  $\text{Li}(\text{CF}_3\text{SO}_2)_2\text{N}$  and  $\text{LiC}_4\text{F}_9\text{SO}_3$  or their mixture.

12. (Currently amended) The method of claim 7, wherein said matrix polymer is any one of polyacrylonitrile, polyvinylidene ~~fluoride~~ fluoride, polytetrafluoroethylene, polyhexafluoropropylene, polyethylene oxide, polypropylene oxide, polyphosphagen, polysiloxane, polyvinyl acetate, polyvinyl alcohol, polymethyl methacryate, polyacrylic acid, polymethacrylic acid, styrene-butadiene rubber, nitrile-butadiene rubber, polystyrene or polycarbonate.

13. (Previously Presented) The method of claim 7, wherein said nonaqueous solvent is selected from the group consisting of ethylene carbonate, propylene carbonate, butylene carbonate,  $\gamma$ -butyrolactone,  $\gamma$ -valerolactone, diethoxyethane, tetrahydrofuran, 2-

methyltetrahydrofuran, 1, 3-dioxane, methyl acetate, methyl propionate, dimethylcarbonate, diethyl carbonate or ethylmethyl carbonate or their mixture.

14. (Previously Presented) The method of claim 7 further comprising inserting said wound electrodes into a film pack.

15. (Previously Presented) The method of claim 14 further comprising subjecting said film pack to heat treatment so that said gel-electrolyte layers formed on said positive electrode and said gel-electrolyte layers formed on said negative electrode are integrated with each other into one continuous seamless layer.

16. (Canceled)

17. (Previously Presented) A method of manufacturing a solid-electrolyte battery comprising:

forming gel-electrolyte layers on both sides of a positive electrode and a negative electrode, wherein one of said solid-electrolyte layers formed on said positive electrode and one of said gel-electrolyte layers formed on said negative electrode face each other;

winding said positive electrode and said negative electrode after pressing; and

subjecting said wound electrodes to heat treatment so that said gel-electrolyte layers formed on said positive electrode and said gel-electrolyte layers formed on said negative electrode are integrated with each other into one continuous seamless layer,

wherein,

wherein said gel-electrolyte layers comprise an electrolyte salt, a  
nonaqueous solvent and a matrix polymer.